

## REMARKS

Claims 1-49 are pending in the current application. Claims 1, 23, 44 50 and 51 are independent claims. Reconsideration and allowance of the application are respectfully requested.

### 35 U.S.C. 103(a) – Trainnin in view of Cook

Claims 1-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Publication No. 2003/0235170 (“Trainnin”) in view of U.S. Patent No. 6,005,884 (“Cook”). Applicant respectfully traverses this art grounds of rejection.

#### Discussion of Trainnin

Trainnin is directed to a method, apparatus and system for distributed access points within a wireless local area network. Trainnin teaches partitioning an access point into two physically separate components, and refers to this configuration as a ‘distributed’ access point. For example, Trainnin states:

[0014] In one embodiment of the invention, a distributed access point configuration is implemented for a wireless local area network system. Instead of having each access point configured and equipped to perform both the media access functions and the specific point control functions according to a wireless communication protocol or standard such as the IEEE 802.11 standard, an access point according to one embodiment of the invention is comprised of two parts or two components. One component is called an access point repeater (APR) and the other component is called an access point server (APS). In one embodiment, one APS can support multiple access point repeaters (APRs).  
*(See [0014] of Trainnin, Emphasis added)*

Accordingly, the combination of the APR and APS corresponds to what would normally be referred to, functionally, as a wireless access point. The APS and its corresponding APR are connected with a wired connection. For example, Trainnin states “the APR and the APS are connected via a wired network (e.g., an Ethernet wired LAN) to communicate with each other” (See [0015] of Trainnin), “[t]he APS 210 and the APRs 220 are connected and communicate

with each other via a link 230, which is part of a wired network 240” (see [0016] of Trainnin), “[e]ach APR 220 is a multi-addressable entity or device on the wired network (e.g., Ethernet LAN)” (See [0019] of Trainnin), “APR 220 is a multi-addressable entity on the wired network (e.g., the Ethernet LAN)” (See [0021] of Trainnin), “[t]he association response is then sent from the APS to the APR through a wired network (e.g., the Ethernet LAN)” (See [0028] of Trainnin), as well as numerous other instances throughout Trainnin (e.g., see [0029] and [0032], as well as Trainnin’s Abstract). Paragraph [0032] of Trainnin discusses an alternative embodiment wherein a mobile device can be connected to a wired connection and used as an APS or APR, but this implementation is not functionally different than the other embodiments in Trainnin, as a wired connection remains a prerequisite.

#### Deficiencies of Trainnin

The APR in Trainnin is clearly is not a wireless repeater in the sense that it does not repeat wireless signals. Rather, the APR corresponds to a portion of an access point that has its wireless transceiver section physically separate from its server or processing section (i.e., the APS). This distinguishes the independent claims from Trainnin for a number of reasons, which will now be explained.

For example, consider the claim limitation “detecting the presence of at least one access point based on information transmitted on one of at least two frequency channels using a wireless transmission protocol associated with the at least one access point” as recited in claim 1 and similarly recited in independent claims 23 and 44. The APR in Trainnin does not detect the presence of an access point because the APR itself is part of the access point. Applicant again refers the Examiner to [0014] of Trainnin, which states “an access point according to one embodiment of the invention is comprised of ... an APR ... and an APS”.

Further, as evidenced by numerous statements in Trainnin (reproduced above), the APS and APR are connected by a wired connection. As such, Trainnin cannot disclose or suggest “detecting the presence of at least one access point based on information transmitted on one of at least two frequency channels using a wireless transmission protocol associated with the at least one access point” and/or “wherein the repeater is configured to retransmit second information from the node to the selected at least one access point on another of the at least two frequency channels” as recited in independent claim 1 and similarly recited in independent claims 23 and 44 (Emphasis added).

Also, Trainnin is completely silent regarding wireless frequencies associated with the transmissions from the APRs (which are the only wireless transmissions discussed in Trainnin). Certainly, nothing within Trainnin discloses or suggests receiving a wireless signal on a first frequency and retransmitting the wireless signal on a second frequency. This is true for a number of reasons, including (i) Trainnin’s APR’s are not actually repeaters in the sense that wireless signals are not repeated, (ii) no discussion of frequencies used for transmission is present within Trainnin and (iii) because the connection between the APRs and APSs is a wired connection, Trainnin cannot distinguish its wireless signals on any frequency from another receiving frequency. Surely, the Examiner cannot be suggesting that the wireless signals exchanged between the mobile units and the APR are repeated, as this exchange would simply repeat back and forth the same information. Accordingly, Trainnin cannot disclose or suggest “wherein the repeater is configured to retransmit first information received from the selected at least one access point on one of the at least two frequency channels to a node in the wireless network, wherein the repeater is configured to retransmit second information from the node to the selected at least one access point on another of the at least two frequency channels” as recited in independent claim 1 and similarly recited in independent claims 23 and 44.

Cook does not cure deficiencies of Trainnin

The Examiner admits that Trainnin does not disclose “operating a repeater”, thereby appearing to appreciate that the APR/APS implementation does not correspond to a wireless repeater (See Page 4 of the 5/30/2008 Office Action). However, the Examiner cites to Cook as allegedly curing this particular deficiency of Trainnin.

As an initial matter, Cook’s repeaters also appear to have a wired connection to the base station or access point. Cook states “[t]his RF communications path includes the wireless link between a remote terminal 16 and a repeater 18, and the wired link between the repeater 18 and the base station 12.” (See Column 12, lines 51-54 of Trainnin). Thus, even if the repeater 18 has a bi-directional communication link, its uplink portion (i.e., element 26 in Cook) corresponds to a wired connection, as in Trainnin (e.g., see Column 12, lines 38-40 of Cook, where an example of this link is referred to as a co-axial cable, which is a wired connection). Further, Cook does not appear to disclose or suggest, at any of the repeaters, using different frequencies for receiving the signal to be retransmitted and the signal retransmission itself.

Accordingly, because Cook shares the same deficiencies as Trainnin with regard to limitations present within independent claims 1, 23 and 44, Applicant respectfully submits that Cook cannot cure the suggestion and disclosure deficiencies of Trainnin as discussed above.

As such, claims 2-22, 24-43 and 45-49, dependent upon independent claims 1, 23 and 44, respectively, are likewise allowable over Trainnin in view of Cook at least for the reasons given above with respect to independent claims 1, 23 and 44.

Applicant respectfully requests that the Examiner withdraw this art grounds of rejection.

New claims 50 and 51 also recite similar subject matter as claim 1 and should be considered allowable at least for similar reasons as discussed above in relation to claim 1.

### CONCLUSION


It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue, or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026. If a fee is required for an extension of time under 37 CFR 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

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